

## DEPARTMENT OF THE ARMY

US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT CARSON
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IMNW-CAR-ZA (100)

## MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Energy Efficiency Measures for FY07 (Cooling Season)

- 1. Implementation of the Command energy reduction program is based on Executive Order 13423, which requires an energy use per square foot reduction of 3% per year and 30% by 2015 from a 2003 baseline. Adherence to the energy efficiency measures during the cooling season is essential in order to minimize utility costs and to realize Fort Carson energy program objectives. While it will be difficult to achieve our reduction goals, it is possible with everyone's cooperation.
- 2. The efficient use of our energy resources is the responsibility of everyone living and working at Fort Carson. Commanders and staff directors at all levels are to ensure compliance with the measures outlined in Enclosure 1.

Enc1

Garrison Commander

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## ENERGY EFFICIENCY MEASURES FOR FY 07 (COOLING SEASON)

- 1. Command/Directorate Energy Conservation Officers (ECOs) and Building Energy Monitors (BEMs) will be primary points of contact for implementation of this policy. The ECOs and BEMs will perform reviews for conformance with this policy in accordance with assigned duties and initiate service or work requests for repairs and maintenance as appropriate. The ECOs and BEMs will report nonconformance with the policy to the Commander/Director, Facility Manager, a representative from the Directorate or the Environmental Quality Working Group (EQWG) as needed to ensure compliance. Adherence to the cooling season policy will be strictly enforced at all levels of Command.
- 2. Use of natural ventilation, fans and evaporative coolers (also known as swamp coolers) are the preferred methods of cooling in this climate. Air conditioning is the least desired cooling solution. Requests for use of air conditioners in family housing must be submitted in accordance with procedures established by Fort Carson Family Housing, LLC. All other requests for air conditioning must be processed through the Directorate of Public Works (DPW) and the Directorate of Environmental Compliance and Management (DECAM) IAW existing procedures set forth in FC Regulation 200-1. All air conditioning purchases will be required to comply with requirements for elimination of ozone depleting chemicals and will be made in consideration of the maximum energy efficiency affordable. Approval will be based on whether the facility electrical system will support the request and on the criteria below.
- 3. Air-conditioning or chilled air is authorized for the following areas:
- a. Rooms containing equipment requiring a controlled atmosphere, e.g., mainframe computers or servers (not PC's)
  - b. Medical and dental facilities (patient care areas)
  - c. Division and brigade main conference rooms while occupied
  - d. Dining areas, recreational facilities, Commissary, and the Post Exchange and Shoppettes
  - e. Barracks where available
  - f. Buildings on the Chiller plant
  - g. Day care facilities IAW regulatory standards
- h. Rooms occupied by individuals with recognized medical conditions that require a controlled atmosphere
  - i. Family Housing
- 4. Air conditioning requirements (other than family housing):

- a. Most building cooling systems will be energized beginning 1 Jun 07 and will be deenergized beginning in Sep 07. (Heat will be turned off beginning 1 May 07 and will not be turned back on until 1 Oct 07.). Some exceptions may apply such as medical facilities and will be dealt with on a case by case basis through DPW.
- b. Areas authorized air conditioning will not be cooled to a temperature lower than  $\underline{78}$  degrees Fahrenheit. Medical facilities are authorized a temperature no lower than  $\underline{70}$  degrees Fahrenheit.
- c. Air conditioning units that have thermostatic controls must be operated to comply with the authorized cooling temperatures. The DPW will maintain appropriate cooling temperatures for those systems controlled by the Utility Control System (UCS). Air conditioners will not be turned on when outside temperature is below 78 degrees Fahrenheit.
- d. When purchasing new air conditioners the energy efficiency must be considered. New central air conditioners must have a Seasonal Energy Efficiency Rating (SEER) of 12 or higher, and a room air conditioner must have an Energy Efficiency Ratio (EER) of 9.5 or higher.
- e. Air conditioners must be turned off at close of business each day unless the facility is occupied or has sensitive equipment needing the cooling (i.e. mainframes, servers).
  - f. All windows and doors will be kept closed when air conditioners are on.
- g. Air conditioning units that have manual thermostatic control will be turned off when not needed. The UCS will control the shut down of other AC systems on post.
  - h. Buildings on the UCS will be managed by the DPW base operations contract.
- 5. Questions concerning air conditioning in housing areas should be directed to Fort Carson Family Housing, LLC. Tenants can contact the Fort Carson Family Housing, LLC, office at 226-2268.
- 6. Turn off all lighting upon leaving a room regardless of duration of vacancy. Do not use lights when adequate outside light is available.
- 7. Turn off personal computer (PC) monitors when not needed for five minutes or more.
- 8. Additional electrical savings can be realized by lighting only that portion of a building in which night crews are working.
- 9. Off-duty hour and exterior lighting will be eliminated, except when it is essential for safety and security purposes. Except for security lighting required by AR 190-11, no Army requirement exists for security or firelights over the doors of buildings.

- 10. The DPW will continue to place emphasis on cleaning and preventative maintenance on heating, ventilation and air conditioning (HVAC) equipment, e.g., oil bearings, clean filters, etc. The UCS will be utilized to reduce usage while minimizing impacts on building occupants.
- 11. Encourage these easy to accomplish energy saving measures:
- a. Deflect daytime sun with vertical louvers or awnings on windows, or draw draperies and shades in sunny windows. Keep windows and outside doors closed during the hottest hours of the day, open windows in morning or on shady side of the building for natural cooling. Consider installing solar rejecting window film to reduce heat gain.
- b. Keep the lights low or off if day lighting is adequate. Electric lights generate heat and add to the load on the air conditioning equipment.
- c. When purchasing energy consuming appliances, buy items bearing the Energy Star label, as they are the most energy efficient and have long-term cost benefits.
- d. On cooler days and during cooler hours, open windows, doors and bay doors instead of using air-conditioners. Use fans or evaporative coolers.
- e. Dress for higher temperatures. Neat casual clothes of lightweight fabrics are comfortable and are acceptable almost everywhere during the summer.
- 12. For additional energy conservation information visit the DECAM web site <a href="http://www.carson.army.mil/Decam/Homepage.html">http://www.carson.army.mil/Decam/Homepage.html</a> or the Energy Management Program home page at <a href="http://sems.carson.army.mil/environmental/energy/default.htm">http://sems.carson.army.mil/environmental/energy/default.htm</a>. You can also call 526-1739 or 526-2927.